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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,193	08/28/2006	Nils Toft	027651-282	2214
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EXAMINER				
MCNALLY, DANIEL				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
06/01/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/553,193

**Applicant(s)**

TOFT ET AL.

**Examiner**

DANIEL MCNALLY

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said free surfaces" in line 6. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recites a free surface on a first layer but does not provide antecedent basis for another free surface. It is recommended providing antecedent basis for a free surface on the second layer. Claims 4 and 5 also refer to the free surface of the second layer. Claims 2-8 and 11-15 depend from claim 1 and are rejected for the same reason.

Claim 1 is unclear because it recites "joining together said free surfaces are joined together after the flame treatment..." It is unclear if the layers are already joined together when the free surfaces are joined together. It is recommended clarifying that the joining step takes place after the flame treatment and the plasma treatment. Claims 2-8 and 11-15 depend from claim 1 and are rejected for the same reason.

Claims 11 requires the laminate to comprise a first layer of a first material and a second layer of a second material as produced by the method of claim 1. However claim 11 does not recite the first layer is made of aluminum or that the laminate comprises a bulk layer as required in claim 1, it is unclear if the laminate

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of claim 11 is required to have these layers as required by claim 1. Claims 12-14 depend from claim 11 and are rejected for the same reason.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Toft et al. [WO01/85565A1, of record, previously cited, herein "Toft '565"].

Toft '565 discloses a packaging material. The packaging material comprises a first layer of an aluminum material with a paperboard backing having holes and a second layer of a second material, as shown in Figure 1.

With regard to claim 12, Toft '565 discloses the packaging material is used to make a packaging container.

With regard to claim 13, Toft '565 discloses, as shown in Figure 1, the packing material comprises paperboard material with a hole provided therein, and the hole is used for an opening in the packing container.

5. Claims 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Laciamera et al. [US6279779, of record, previously cited, herein "Laciamera"].

Laciamera discloses a packaging material as shown in Figure 3, comprising a first layer (9) of an aluminum material, a paperboard backing (5) having holes(11) and a second layer (10) of a second material.

With regard to claim 12, Laciacara discloses the packaging material is used to form a packaging container as shown in Figure 1.

With regard to claim 13, Laciacara discloses the packing container comprises an opening arrangement as shown in Figure 1, located at a hole in the paper board material (5) as shown in Figure 3.

With regard to claim 14, Laciacara discloses the packaging container comprises a screw top that is arranged to opening the packing container by removing packaging material from the hole by a screwing and pulling motion (column 7, lines 6-54).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8, 11-13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toft '565, in view of either one of Levendusky et al. [US5919517, of record, previously cited, herein "Levendusky"], or Kaschel et al. [EP1099544, of record, previously cited, herein "Kaschel"], and further in view of Li et al. [US6299787, newly cited, herein "Li"].

Toft '565 discloses a packaging material and a method for making the packing material. The method comprises continuously joining a first material and a second material (page 3, line 33—page 7, line 15). Toft '565 discloses the first

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material may be an aluminum foil, and the exposed surface of the aluminum foil can be surface treated to promote surface adhesion with the second material (page 6, lines 1-9; page 6, line 30 - page 7, line 9). Toft '565 discloses the aluminum foil layer is joined to a paperboard backing comprising holes therein on the side opposite the side that is surface treated. It is unclear if Toft '565 (page 7, lines 3-9) teaches the paperboard layer is joined to the aluminum layer before the surface treatment, however in the event that Toft '565 does not clearly suggest joining the paperboard to the aluminum prior to the surface treatment it would have been obvious to one of ordinary skill in the art to first join the paperboard to the aluminum layer, as there are only two options available and the first applied paperboard would clearly identify which side of the foil is to be treated. Toft '565 is silent as to the surface treatment comprising a flame treatment and a plasma treatment steps. Toft '565 appears to suggest treatment over the entire film surface since the film surface is bonded over its entire surface, and the purpose of the surface treatment is to improve bonding, however Toft '565 does not suggest performing the treatment intermittently.

Levendusky discloses a method of continuously joining a first layer of a first material and a second layer of a second material to produce a packaging material. The method comprises providing a first material (10) which is an aluminum foil, subjecting one or both sides of the material to surface treatment, and joining the first material (10) to a second material (24 or 34). Levendusky discloses the surface treatment may comprise a flame treatment and a plasma treatment used in combination (column 2, lines 40-49). Levendusky appears to

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suggest treatment over the entire first layer surface since the surface is bonded over its entire surface, and the purpose of the surface treatment is to improve bonding.

Kaschel discloses a method of producing a multilayer web of material with improved barrier properties. The method comprising joining an aluminum barrier layer with thermoplastic layers (paragraph 0013). Kaschel discloses preferably providing surface treatments to the layers before joining the layers, wherein the surface treatments comprise flaming or "flame treatment" and plasma treatment.

Li discloses a surface treatment method. The method comprises performing a plasma treatment over the surface of a layer to be joined to another layer. Li discloses that intermittent operation of the plasma discharge provides increased adhesive bond strength when compared to surface treatment not performed intermittently (column 3, lines 23-34), and that the intermittent treatment can be performed on a continuous feed (column 3, lines 35-49). Although Li is plasma treating a polymer film, one of ordinary skill in the art would have readily appreciated that Li's treatment technique could be applied to any material that is being plasma treated in order to attempt to improve adhesion as is known to occur for polymer layers.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Toft '565 by using a plasma treatment and flame treatment of the layers to be joined as taught by either one of Levendusky or Kaschel in order to improve adhesion between the joined layers, and to perform the plasma treatment intermittently as taught by Li in order to further

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increase the adhesive bond strength of the treated material. Because the treatment would occur over the entire surface of the aluminum film, the treatment would include locally treating the areas where the holes in the bulk layer are present.

With regard to claims 2 and 3, one of ordinary skill in the art would have readily appreciated that either one of the flame treatment or plasma treatment could have been performed before the other, in order to improve the efficiency of heating the treated material and to improve the bonding of the treated material.

With regard to claims 4 and 5, Levendusky and Toft '565 appear to suggest treatment over the entire film surface since the film surface is bonded over its entire surface, and the purpose of the surface treatment is to improve bonding.

With regard to claim 6, Toft '565 and Levendusky disclose the first material is an aluminum foil material.

With regard to claim 7, Toft '565 discloses the first layer is joined to a thermoplastic layer that can be extruded before the surface treatment, and can be co extruded with other layers. Toft '565 also discloses the outermost layer or "third layer" may comprise a polyethylene material.

With regard to claim 8, Toft '565 discloses the extruded layers can comprise a layer of LDPE.

With regard to claim 11, Toft '565 discloses a packaging laminate comprising first layer of a first material and a second layer of a second material. The method of producing the laminate including a combination of plasma



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treatment and flame treatment is disclosed by either one of Levendusky or Kaschel, as discussed above.

With regard to claim 12, Toft '565 discloses the packaging material is used to make a packaging container.

With regard to claim 13, Toft '565 discloses, as shown in Figure 1, the packing material comprises paperboard material with a hole provided therein, and the hole is used for an opening in the packing container.

With regard to claim 16, Toft '565 discloses a packaging laminate comprising first layer of an aluminum material, a paperboard backing comprising holes therein and a second layer of a second material. The method of producing the laminate including a combination of plasma treatment and flame treatment is disclosed by either one of Levendusky or Kaschel, as discussed above.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toft '565 in view of either one of Levendusky or Kaschel.

Claim 16 is rejected over Toft '565 as modified by Levendusky or Kaschel the same as that above in paragraph 7 not repeated here.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toft '565, either one of Levendusky or Kaschel, Li, and further in view of Laciacara.

Toft '565 as modified discloses a packaging container. Applicant is referred to paragraph 7 for a detailed discussion of Toft '565 as modified. Toft '565 does not disclose the container comprises a screw top that is arranged to

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opening the packing container by removing packaging material from the hole by a screwing and pulling motion.

Laciacara discloses the packaging container comprises a screw top that is arranged to opening the packing container by removing packaging material from the hole by a screwing and pulling motion (column 7, lines 6-54).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the container of Toft '565 to include a screw top that is arranged to opening the packing container by removing packaging material from the hole by a screwing and pulling motion as taught by Laciacara in order to improve the ease of opening the container.

#### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-8 and 11-16 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues Toft is not concerned with providing plasma treatment in which the plasma treatment is performed locally at the regions of the though holes with the plasma treatment being performed intermittently. The use of the term locally is interpreted to require treatment of the areas where the holes are located, which does not exclude treating other areas of the film surface. This is a reasonable interpretation, as claim 5 requires treating over the entire surface. Toft and Levendusky suggest treating over the entire surface which would include treating locally at the areas where the holes are located. If the applicant wants to exclude treating areas other than where the holes are located it is recommend adding this limitation to the claims in agreement with the support

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provided by the specification. As to the requirement of performing the treatment intermittently, newly cited Li teaches using intermittent plasma treatment to further improve adhesion with the treated surface.

Applicant also argues claims 11-14 and 16 reference to flame-treated and plasma treated surface is a recitation of structural attributes or aspects of the laminate, not method characteristics. Applicant has not provided sufficient evidence that the laminate that is flame-treated and plasma treated is structurally different from a laminate that is not flame-treated and plasma treated. In any event claims 11-14 and 16 have been rejected in view of the prior art that discloses all of the required method steps.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MCNALLY whose telephone number is (571)272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel McNally/  
Examiner, Art Unit 1791

/John L. Goff/  
Primary Examiner, Art Unit 1791

DPM  
May 26, 2009